



THE

FREEDOM BUILDER

May 2010

MAGAZINE



ANA compound at Gamberi

The Fort Hood and Fort Bragg of Afghanistan

Making a difference

Provincial reconstruction teams build technical skills and support

Working together

Conference brings AED, Afghan contractors together



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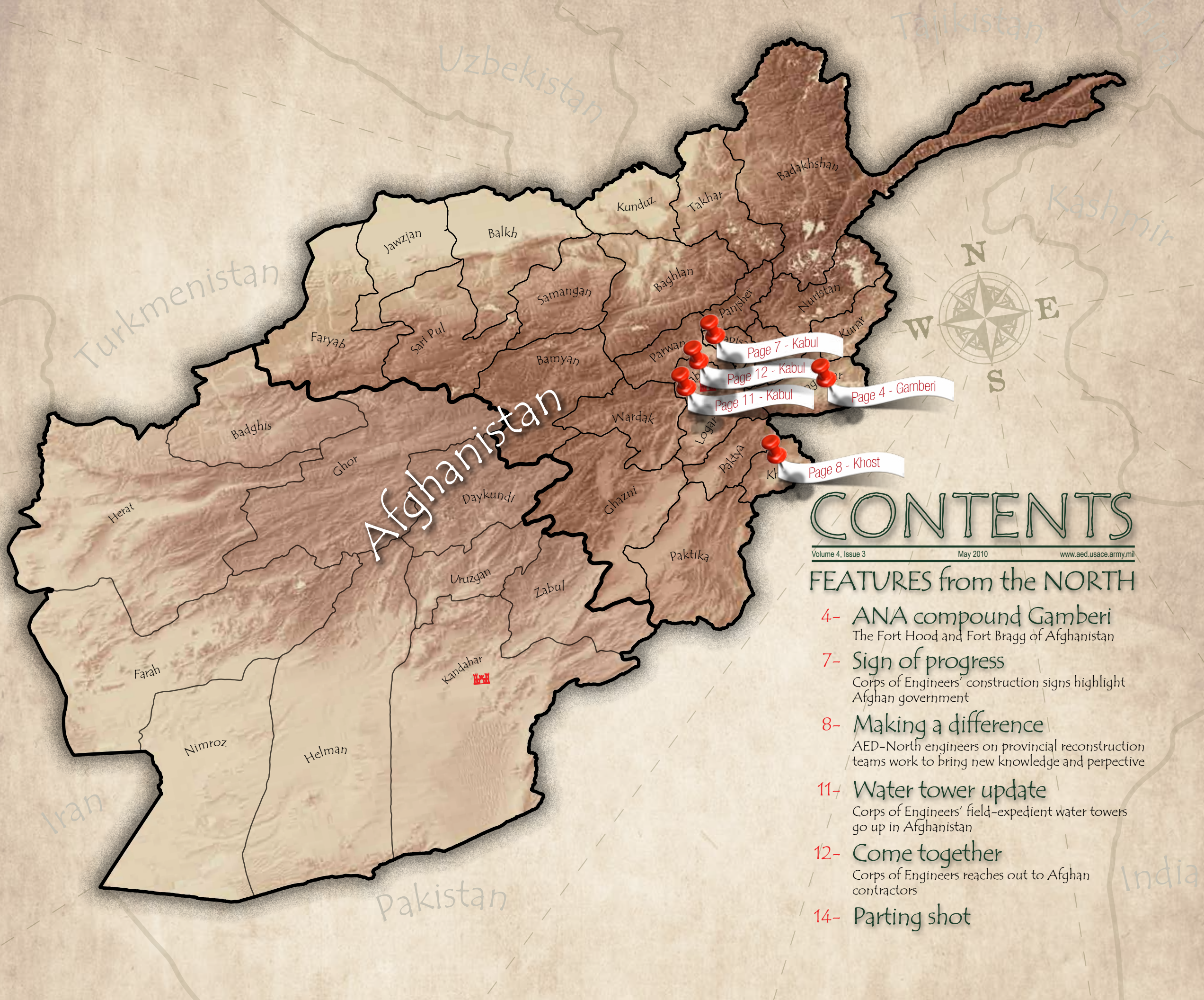
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Cover Image:



Dave Purdy, the project engineer stands in front of ANA installation.
(Full story on pg. 4)

Photo by | **Hank Heusinkveld**



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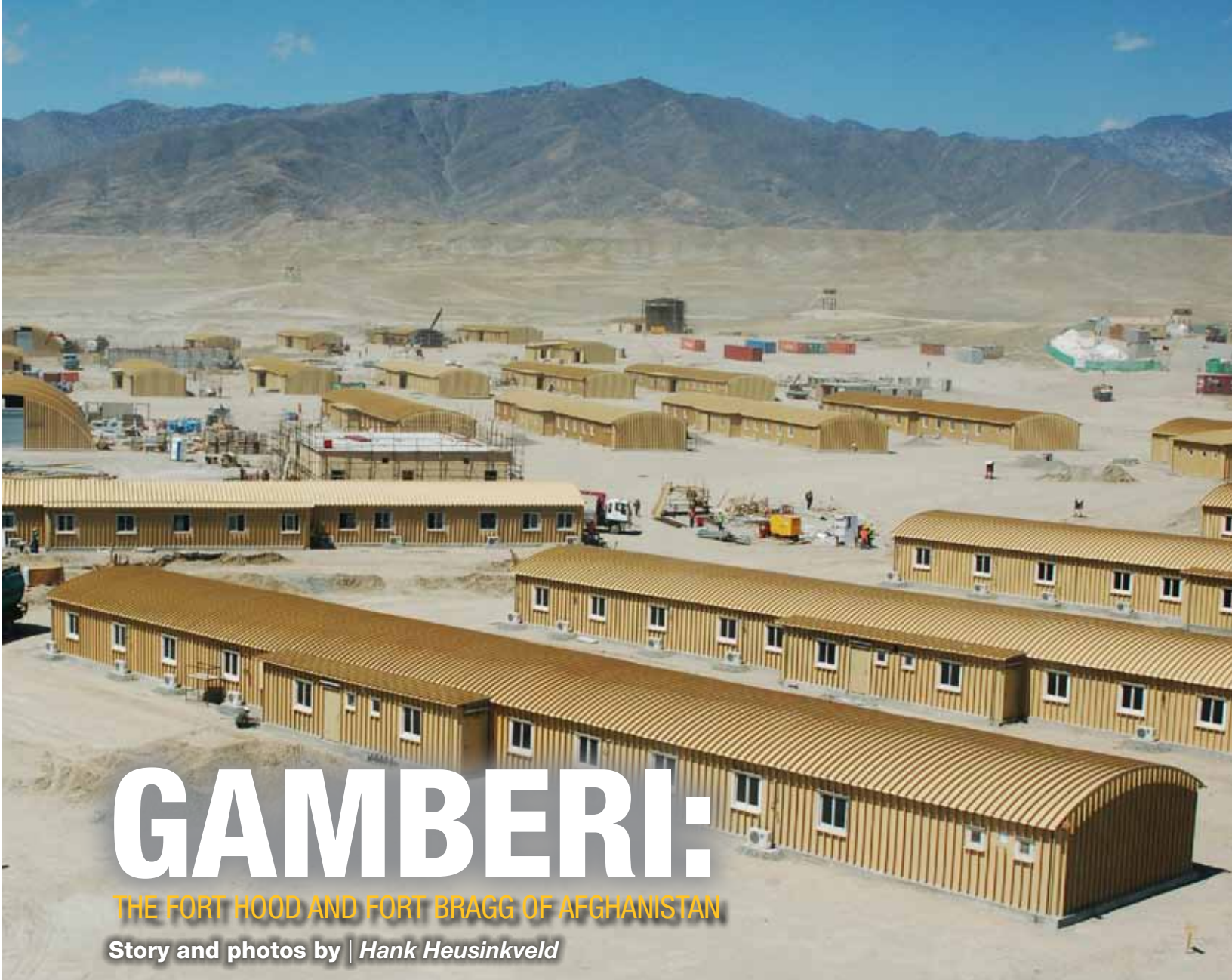
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GAMBERI:

THE FORT HOOD AND FORT BRAGG OF AFGHANISTAN

Story and photos by | *Hank Heusinkveld*

the installation's massive size will accommodate up to 10,000 soldiers of the Afghanistan National Army's.

The Afghanistan Engineer District-North is managing the construction of a massive installation that will accommodate up to 10,000 soldiers of the Afghanistan National Army's 201st Corps. This ANA facility is located in Gamberi near Jalalabad, and is being called the Fort Hood or Fort Bragg of Afghanistan because of its immense size. It will be the hub for the Regional Command East.

"This installation is going to support the HQ of the 201st Corps which is going to be

responsible for the majority of the Regional Command East Area of Operations which deals with mainly Jalalabad all the way back towards Bamyan province," said Major Gary Brock, the Combined Action Team Leader of the 82nd Sustainment Brigade, 82nd Special Troops Battalion for the HQ 201st Corps. "All the units that you're going to see here are going to have a brigade headquarters, a corps support battalion which does all movement and distribution for the entire corps, a garrison support unit,

"A major byproduct of this installation is the sense of security that it has brought locally and regionally."

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and different infantry kandaks. There will also be a regional hospital for both military and civilians, and a regional range complex to support small arms all the way up to mortars."

Dave Purdy, the project engineer at Gamberi, is a U.S. Army veteran. Having been to numerous U.S. Army installations, including Fort Wainwright, Alaska where he works for the Alaska District, he is amazed at the size of Gamberi.

"If you were to try to make an analogy it would be similar to Fort Hood in Texas or Fort Bragg in North Carolina," he said. "But the immenseness of this contract has not gone forward fully yet because we're going to be adding more phases. We're going to make a regional military training complex, and we're going to construct a 50-bed regional hospital for both military and civilians. Right now the medical facilities



Numerous guard towers at Gamberi add extra sets of eyes to view areas surrounding the installation.

are limited, so the hospital will be very helpful."

Currently, the population of the Gamberi ANA facility is about 1400 ANA soldiers along with 200 U.S. servicemembers to include contractors. By next year the population will rise to approximately 9,000 to 10,000. Purdy said he enjoys the challenge of tackling such a big project. Communication is the number one thing that keeps everything running smoothly and efficiently.

"It's a big scope on a big scale and it's something that I normally wouldn't be able to do back at Fort Wainwright," poorly said" Communication is probably the biggest thing that we work on. We have a base coordination meeting every week and that enables the Afghanistan National Army, the U.S. Army, the contractors and myself to try to coordinate all of the activities that are going on here on a daily basis. We have training that's going on here that has to be coordinated with construction, and we have to make sure the construction doesn't interfere with the training. There are a lot of activities that are going on all at the same time."

A major byproduct of this installation, Purdy said, is the sense of security that it has brought locally and regionally.

"Jalalabad is the closest city nearest here



Beefed-up perimeter walls stretch for miles around the installation.

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and that falls dead center between Gamberi and the Jalalabad Airfield. So this is the only installation that provides security in this area”, he said. Of course this used to be a Taliban stronghold, but now with this installation the Afghanistan National Army is able to go out on daily patrols with their U.S. counterparts in the local area and beyond.”

Purdy said that in addition to the physical security the installation is beginning to provide it’s also creating economic stability.

”There’s not a large local civilian population, but with the population that is nearby they’re mostly employed here so it’s actually creating jobs.”

Overall, the Gamberi installation is changing the dynamics of the area. Brock said that the local villagers just outside the

fence line have grown used to construction activity, and are appreciative of employment opportunities that have been created.

“We’ve established good rapport with all of the local villages. The idea behind the Gamberi installation was to put it amongst the people so that they feel a sense of security by keeping anti-Afghanistan forces away. This, in turn, leads to trust in the Afghanistan National Army and the government of Afghanistan”, Brock said. And my overall feel that once all is said and done this place will be running equivalent to the efficiency of an American military installation with its own standing life support, and basically its own stand alone city which support the soldiers of the installation and outlying areas.”



The Gamberi installation provides economic stability for nearby villagers through construction jobs.

Signs update



Corps of Engineers’ construction signs highlight Afghan government

Story by | Paul Giblin

The new sign is intended for highlighting Afghans involvement in developing the infrastructure projects.

KABUL, Afghanistan – Signs of progress are popping up in front of construction sites all across the country.

Earlier this year, the U.S. Army Corps of Engineers mandated uniform design requirements for informational signs posted at hundreds of Afghan police stations, army bases, roads and other infrastructure projects under construction.

Among the first projects with the new-style signs are a fueling depot under construction at the Nohammad Dawod Khan Hospital in the capital city of Kabul.

The new design is intended for Afghan audiences. It highlights the Afghan government’s involvement in developing the infrastructure projects.

The signs are written in Dari or Pashto, which are the official languages in Afghanistan, with English sub-titles. The color scheme is taken from Afghanistan’s flag – black, red and green. The redesigned signs omit any reference to the United States or the Corps of Engineers.

The strategy is to provide visibility and credibility to Afghan’s national and provincial governments for a populace that is largely tribal and clan oriented, said Rex Goodnight, the Corps of Engineers’ chief of engineering

and construction in northern Afghanistan.

“The purpose of the signs is to give the people of Afghanistan the understanding that these are for them, that they’re being built with the cooperation of their government,” Goodnight said.

The signs also make it clear that Afghanistan – not the United States – will be responsible for buildings, roads and other projects upon their competitions. “The big thing is we want the operations and maintenance of these facilities eventually to fall under their ownership and purview,” Goodnight said.

Within the year, the signs are expected to be posted at Afghanistan National Army bases, Afghanistan National Police stations, roads, dams and other project sites across the country.

Signs at some on-going construction projects will be replaced with the new signs as well. Previously, the content and design of construction signs were left to contractors, which produced a wide array of designs that frequently featured the United States prominently.

Brig. Gen. John R. McMahon, the former director of engineering for U.S. Forces in Afghanistan, initiated the change last year.



MAKING A DIFFERENCE

Engineers on remote provincial reconstruction teams assist locals

Story and photos by | Hank Heusinkveld

Hector Cruz, U.S. Army Corps of Engineer's assigned to the Khost Provincial Reconstruction Team, speaks with a group of engineers during an training course designed to help teach fundamentals of being an engineering teacher. (Photo by U.S. Air Force Staff Sgt. Stephen J. Otero, Khost PRT Public Affairs)

KHOST PROVINCE, Afghanistan Afghan civil engineer students from the University of Khost got a boost to improve their practical knowledge of what it takes to be in the demanding profession with help from the Khost Provincial Reconstruction Team, and an Afghanistan Engineer District-North civil engineer on the PRT helped get them up to speed.

In January, Hector Cruz lead an intense, weeks-long course that immersed the students in everything from how to read sophisticated engineering instruments to what to look for when designing roads.

"The course was designed to train the local engineers on quality assurance," Cruz explained. "They don't have any practical

experience when they graduate, so we train them so that they can eventually work either with an organization like a PRT or USAID. We train them on how to do something correctly engineering-wise. This covers everything from safety all the way to vertical and horizontal construction."

The mission of the PRT is to connect the Afghan people to their government by transforming the environment to increase the legitimacy of the Government of the Islamic Republic of Afghanistan at the Provincial and District Levels. In addition, the PRT is designed to influence the populace to reject influence by anti-Afghanistan forces. Efforts are focused on building Afghan governance and professional capacity to

provide and sustain basic services, access to justice, security and a lawful economy.

Cruz said the engineering students are more than willing to get started reconstructing their war-battered country. Their foundation as students is solid, and with the practical experience they gained from the course, they're well on their way to becoming responsible and dedicated engineers who are willing to do what it takes for the massive reconstruction of Afghanistan.

"The curriculum from the University of Khost is similar to any university in the U.S. I had a very interactive class where I encouraged them to ask questions. And they do ask very good questions" Cruz said. "They are very intelligent and willing to learn, and they're very interested in growing as engineers. One thing that I try to instill in them is that when they graduate from college, that's just the first step. After that, you have to keep learning and keep growing. I give them a lot of references so they can keep up with engineering trends."

The PRT in Khost is currently developing 30 projects in partnership with the Afghan government throughout Khost's 13 districts including schools, major roads, retaining walls to prevent flooding of farm land, security walls, medical clinics and government facilities. Each project is targeted to address a specific concern or issue in the region, and is coordinated with local and district leadership to ensure effectiveness and sustainability. While the contracting and construction is largely an Afghan-led process, PRT civil engineers like Cruz conduct regular quality assurance assessments of ongoing projects to ensure proper building processes, material usage and contract management.

A few provinces away in Bamyan, another AED-N civil engineer is making a difference in reconstruction efforts. Carl Knaak, a project engineer on the Bamyan PRT, has helped make life easier for Afghans in Bamyan's seven districts. A veteran PRT member, his first tour began in October of 2007 and lasted through November of 2008 to stand up the Bamyan PRT. During his second stint, he's helped provide technical assistance and project management for the construction of roads, clinics, schools, and humanitarian aid.

"When I signed up initially I wanted to do something different," he said. "The PRT's missions are to make life better for people, to make their lives less susceptible to outside influences by giving them decent

schools, decent clinics, and good roads. So that really has a lot of impact."

Knaak said a few projects in particular have made immediate impacts. The PRT helped build the New Bamyan Radio Station, a 300-500 watt station that's helping to broadcast information from the government, and a regional

health training center funded by Singapore to train nurses, midwives and doctors.

"The reconstruction teams goal is to go into a destroyed society and help it recover to make it less susceptible to outside influences. We help give them basic infrastructure and a certain sense of pride to be a supportive person in their community."

Knaak said there are obstacles that are challenging for the PRT. Number one is illiteracy.

"Right now we're trying to do a training program to try to develop some skills. And oddly enough when I went out to advertise for it there are people who wanted to take it, but they were illiterate", Knack said. "We've


"The reconstruction team's goal is to go into a destroyed society and help it recover to make it less susceptible to outside influences."

had to modify some of our courses because of that, and we try to make it more hands on. We can't use something like PowerPoint."

Knaak said that being a member of a PRT sometimes means cross-training into other fields. The preservation of water supplies is a big priority, and it takes some brainstorming to find solutions to problems.

"I hear complaints about people getting sick from wells. What's happening is that they're building livestock corrals near the wells or they'll have a well that's level to the ground where anything can fall into it. And there is a unique issue that a lot of areas are contaminated with salt", Knack said.

With livestock, especially poultry, they're very susceptible to salt. So the agricultural folks on the PRT explained that may be why there are no chickens or turkeys in some areas. There are correlations between salt and poultry and well water."

Both Cruz and Knaak said they find their roles on the PRTs very rewarding, and they feel they're making a difference for the people of Afghanistan. The knowledge they've acquired over the years as civil engineers will trickle down to the smallest projects that make up the overwhelming mission of rebuilding this country. 



Project Engineer Carl Knaak of the Bamyar PRT works with two Afghan contractors on a building design in Bamyar.

Water towers update



Corps of Engineers' bolt-together water towers go up in Afghanistan

Story by and photos | Paul Giblin

Photo of the newly designed bolt-together water tower being installed at a national police station.

KABUL, Afghanistan – Construction crews across Afghanistan are beginning to erect the U.S. Army Corps of Engineers' newly designed bolt-together water towers at national police stations.

Hundreds of the towers will stand as monuments to the concept of standard design, said Mark Hoague, the chief of engineering at the U.S. Army Corps of Engineers' northern Afghanistan district headquarters.

Structural engineers in Kabul and Mobile, Ala., worked together late last year to design water towers that could be constructed and maintained in remote locations where electricity is unavailable, construction expertise is scarce and materials are limited by what can be transported by donkeys.

Those limitations ruled out any welding.

The engineers designed four-sided towers constructed with 3½-inch by 3½-inch steel angle bars, affixed to concrete foundations. The structures feature series of stacked five-meter sections with cross bracing on all four sides.

The towers come in two heights: 15 meters, which use three stacked sections and 1,458 sets of nuts and bolts; and 20 meters, which require four stacked sections and 1,752 sets of nuts and bolts.

The parts arrive at construction sites

pre-designed, pre-cut and pre-drilled, so construction crews need only to assemble the parts. Even the water tanks that sit atop of the towers are made of bolt-together parts.

Identical towers are being constructed at hundreds of existing and planned Afghan national army bases and police stations across the arid country.

A 15-meter tower was surprisingly easy to assemble at Police Station 9, which is under construction in downtown Kabul, said Levent Donmez, the construction manager for Zafer Taahhut Insaat ve Ticaret A.S., a Turkish construction company that's building the station.

Zafer's crew assembled the first five-meter section in place on the foundation, then built the next two sections on the ground, and used heavy-duty cranes to lift the sections into place. The job took three days, excluding construction of the tank and plumbing.

"It was not difficult," Donmez said on May 5. "The manufacturer built the anchorages and all the steel construction. We only built the reinforced concrete part of it. It was already manufactured, everything."

In remote locations, construction crews use ropes and pulleys to hoist individual parts into place as they assemble each section atop of one another, rather than using cranes to lift entire sections.

The ease of construction underscores the value of standard design, Hoague said. "That was the whole intent of this thing," he said. "It seems to be a success."

The primary designers were Christa Besing, Doug Jamieson, Hoague and Peter Schei in Afghanistan, and Allison Pierce and Michael Thompson in Alabama. Their trans-Atlantic design collaboration took about six weeks. 



Close-up view demonstrating how the steel angle bars are assembled and bolted together.



Come together

Corps of Engineers reaches out to Afghan contractors through conference

Story by | Paul Giblin

Photos by | Hank Heusinkveld

The InterContinental Hotel hosted the small business conference on May 10 which marked the Corps second this year. It attracted more than 400 Afghan small business owners.

KABUL, Afghanistan — U.S. Army Corps of Engineers officials called attention their plans to award millions of dollars worth of construction projects to Afghan-owned businesses during a high-profile business conference in the nation's capital city earlier this month.

The Afghan First initiative is intended to sign as many Afghanistan firms as possible to build U.S.-funded Afghan army bases, police stations, roads and other infrastructure project around the country. The objective is to pump the money spent on the developments into the country's economy, and to win public support.

Previously, the Corps of Engineers largely relied on established construction companies based in the United States, Turkey, India and other countries to serve as the prime

contractors for projects in Afghanistan.

The event at the InterContinental Hotel on May 10 marked the Corps of Engineers' second small business conference in Kabul this year. It attracted more than 400 Afghan small business owners, four Afghan TV news crews and a member of the Afghan congress.

Col. Michael McCormick, the commander of the Corps of Engineers' district office in northern Afghanistan, outlined the scope of work that will be offered this year and asked the business leaders in the audience to bid for the projects. He also encouraged them to work with the Corps of Engineers to develop on-the-job training programs for their employees.

"Education and vocational training always will be a cornerstone to any country's success," he said during the keynote address.



Mike Weaver explains that the Corps of Engineers is committed in helping to boost Afghanistan's economy.

"Ultimately, a larger skilled workforce in Afghanistan will reduce the need for foreign laborers. That in turn will boost the country's economy by keeping the wages paid for these contracts within Afghanistan's borders," McCormick said.

Other Corps of Engineers officials followed with seminars on how to prepare bids, and how to abide with U.S. contract provisions concerning ethics, security, management, safety and other workplace matters.

The conference was well received by a business community that essentially is starting anew after decades of war, said Sardar Roshan, executive director of the Afghanistan Technical and Vocational Institute.

"Everything can be used, any help. The very occasion of putting together that many businesses, it will start from networking," he said in English.

True to his words, during the first break during the all-day program, the Afghan contractors mostly stayed to themselves as they quietly sipped tea and ate cake. Later

though, they mixed more with each other and with officials from the Corps of Engineers and its presenting partners, the Afghanistan Technical and Vocational Institute and the Afghanistan Builders Association.

The culture is such that many Afghan business owners need specific and directed encouragement to lead their companies, Roshan said. Many business owners lack that experience, because previously executives of international companies served as the middle men between the Corps of Engineers who awarded the construction contracts and Afghan laborers who performed the work.

"Keeping the distance shorter and direct between clients and the people who will be putting their hands on dirt, that is a very significant development," Roshan said during a break in the schedule.

The Afghan First initiative clearly is providing motivation for Afghan business owners to take a proactive approach to improve their bidding and project-management processes, he said. "It gives hope, because so far, with many Afghan businesses, it was taken for granted that unless you were with some foreign company, you were nothing," he said.

Afghan business and government leaders support the effort to reach out directly to small business owners, but the initiative is a bit overdue, said Naseem Akbar, director of the Afghanistan Investment Support Agency.

"The conference, I call it satisfactory, because I wish it happened four or five years back," Akbar said.

After 30 years of war, the country's construction sector itself needs development, so the business guidance provided during the seminars was well received by members of the audience, he said. The instruction on how to meet the U.S. bidding requirements was particularly useful.

"The construction companies, they should empower themselves, specifically on the construction project context. They should be able to bid and they should be able to understand the complex nature of the contracts and the methods of procurement and all the delicate technicalities that exist," Akbar said. 📷



Parting Shot

A Bee hovers on apricot blossoms on a tree located outside AED-N headquarters at Qalaa House Kabul.

Photo by | *Hank Heusinkveld*